



THE CITY OF
SAN DIEGO
+
CALIFORNIA

City of San Diego
Public Utilities Department
Wastewater Treatment and Disposal
Backup Generators (BUG) Project
February 2012

Background



- ▲ On September 8, 2011 San Diego was subjected to a regional power outage.
- ▲ Public Utilities Department's facilities were affected.
- ▲ Sewage released from two of the major pump stations.
- ▲ Wastewater Pump Stations meet all current EPA requirements for power redundancy (two independent power feeds from SDG&E).
- ▲ To prevent future re-occurrences, on site backup diesel fueled power generators will be provided.

Facilities To Receive Generators



The facilities will receive 2MW portable generator units:

- ▲ Pump Station (PS) 1,
- ▲ Pump Station 64,
- ▲ Pump Station 65,
- ▲ Penasquitos Pump Station,
- ▲ North City Water Reclamation Plant(NCWRP)

Environmental Monitoring and Technical Services (EMTS) Laboratory will receive a skid mounted 400KW generator.

Facility Locations



**PENASQUITOS
PS**

PS 65

PS 64

NCWRP

EMTS

PS 1



Major Project Components



- ▲ Purchase of the seven (7) portable 2 MW generators and associate transformers and cables through the National Joint Powers Alliance (NJPA).
- ▲ Select Design-Build contractor to provide a permanent connection for the purchased generators as well as one (1) 400KW skid mounted generator for the EMTS laboratory.

Permanent Installation



Selected Design/Build contractor will:

- ▲ Install concrete pads for mounting the generators;
- ▲ Install transformers, conduits and cables underground;
- ▲ Install Automatic Transfer Switches - controls respond to electrical outage within minutes;
- ▲ Provide diesel fuel storage tanks for up to three (3) days; and
- ▲ Install necessary circuit breakers at existing facilities for generator connection.

The 2MW generators will be portable and will be able to relocate on short notice.

Total Project Cost



➤ Purchase of the 7 generators, five transformers, and required cables through the NJPA	\$ 7,900,000
➤ Permanent Installation of the 8 generators	\$ 4,600,000
➤ Contingency for possible APCD control upgrades	\$ 3,800,000
➤ Admin. Costs	<u>\$ 450,000</u>
ESTIMATE TOTAL PROJECT COST	\$ 16,750,000

Schedule



- Purchase of the 7 generators, five transformers, and required cables through the NJPA May 2012
- Permanent installation of the 8 generators July 2013

Thank You